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10/591,077	08/30/2006	Norishige Emoto	1033318-000034	5955
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EXAMINER				
CORBO, NICHOLAS T				
ART UNIT		PAPER NUMBER		
2427				
NOTIFICATION DATE		DELIVERY MODE		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

**Application No.**

10/591,077

**Applicant(s)**

EMOTO ET AL.

**Examiner**

NICHOLAS CORBO

**Art Unit**

2427

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 December 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 5) ☒ Claim(s) 1-6 and 8-13 is/are pending in the application.
- 5a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 6) ☒ Claim(s) 11 is/are allowed.
- 7) ☒ Claim(s) 1-6, 8-10, 12 and 13 is/are rejected.
- 8) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 9) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/02/2011 has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-6 and 8-13 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2 and 4-6, and 8-10, and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant admitted prior art Oki et al (hereinafter referred to as Oki) JP 2002209193A in view of Bishop et al (hereinafter referred to as Bishop) US 4910683, and further in view of DeMoney US 6064379, further in view of Duso et al

(hereinafter Duso) US 6625750, and further in view of Nakamura et al (hereinafter Nakamura) US 5913039.

Referring to claim 1, Oki discloses a video information distribution and display system comprising:

a video information distribution device that distributes and outputs video information including dynamic image video information and processed digital static image video information, and an image control signal (**see Paragraph 0012 for disclosing a video information distribution device distributing animation/dynamic image video information and processed/compressed (see Paragraph 0025 for disclosing the still pictures are transmitted after carrying out data compression) digital static image/still picture video information, and see Paragraph 0016 and 0032 for disclosing the image control signal)** for disclosing ; and

a video information receiving and display device that receives and displays the video information (**see Paragraphs 0012-0015 for disclosing the train loading/receiving video information distribution display system**), wherein

Oki is unclear as to the display device restores in advance a state before processing of processed digital static image video information of a next static image to be displayed, in accordance with an instruction of the image control signal, and stands by for the next display and a schedule management section generating the image control signal on the basis of schedule data which specifies an order and duration of displaying the content to be displayed, and when video information not included in the

schedule data is to be displayed, a comparison of timing associated with the schedule data and timing associated with the video information not included in the schedule data is performed to determine a timing for generating an interrupt image control signal.

Bishop discloses a display device restores in advance a state before processing of processed digital static image video information of a next static image to be displayed, in accordance with an instruction of the image control signal, and stands by for the next display (**see Col. 5, Line 6-29 for disclosing the next image to be displayed is restored/rendered into the display buffer that is not being displayed/standing by for next display in accordance with an instruction of a image control signal**).

At the time of the invention, it would have been obvious to a person having ordinary skill in the art to incorporate the known technique of double buffering images of Bishop with the system of Oki in order to improve the displaying of images by avoiding the need to recalculate and redisplay all points comprising the displayed image any time a change of the relative viewpoint of the data is request by a user (**see Bishop, Col. 1, Lines 13-36**).

Oki in view of Bishop is unclear as to a schedule management section generating the image control signal on the basis of schedule data which specifies an order and duration of displaying the content to be displayed, and when video information not included in the schedule data is to be displayed, a comparison of timing associated with the schedule data and timing associated with the video information not included in the

schedule data is performed to determine a timing for generating an interrupt image control signal.

DeMoney discloses a schedule management section generating the image control signal on the basis of schedule data which specifies an order and duration of displaying the content to be displayed (**see Fig. 2 and Col. 4, Lines 44-49 for disclosing generation of multimedia content is controlled on the basis of schedule data/playlist which specifies an order and duration of displaying the content**).

At the time of the invention, it would have been obvious to a person having ordinary skill in the art to incorporate the playlist of DeMoney with the system of Oki in view of Bishop in order to allow a system operator to flexibly specify the manner in which admission delays (the delay between the time when the play of a particular title on a playlist is commanded and the actual initiation of play) are accounted for to compensate for (**see DeMoney, Col. 2, Lines 11-14 and 30-31**).

Oki in view of Bishop, and further in view of DeMoney is unclear as to when video information not included in the schedule data is to be displayed, a comparison of timing associated with the schedule data and timing associated with the video information not included in the schedule data is performed to determine a timing for generating an interrupt image control signal.

Duso discloses when video information not included in the schedule data is to be displayed, generating an interrupt image control signal (**see Figs. 34-35 and Col. 45, Line 25 – Col. 48, Line 39 for disclosing when video information not included in**

**the schedule (“one or more clips” not in the original playlist created in step 422) an interrupt image control signal for displaying the clips not included in the playlist/schedule can be generated and sent to the display device (step 423 to 424) to insert the clips not originally included into the schedule).**

At the time of the invention, it would have been obvious to a person having ordinary skill in the art to incorporate the known technique of inserting events into a previously set schedule with the known system of Oki in view of Bishop, and further in view of DeMoney in order to predictably improve the system by allowing the convenience of dynamically revising the play-list during broadcast with new material (see Duso, Col. 48, Lines 22-26).

Oki in view of Bishop, further in view of DeMoney, and further in view of Duso is unclear as to a comparison of timing associated with the schedule data and timing associated with the video information not included in the schedule data is performed to determine a timing for generating insertion of the next video information.

Nakamura discloses a comparison of timing associated with the schedule data and timing associated with the video information to be inserted to be displayed next is performed to determine a timing for generating insertion of the next video information (see Fig. 10 and Col. 13, Lines 11-38 for disclosing the timing associated with the schedule data/transmission schedule table (this timing is interpreted as to whether the timer of the transmission schedule has reached the start time of the next transmission video, or next available slot to display) and the timing associated with video information to be inserted (this timing is interpreted as the

**fact that it is to be displayed next) are compared to determine the timing, or when the next video information will be signaled to be inserted to be displayed to the client).**

At the time of the invention, it would have been obvious to a person having ordinary skill in the art to incorporate the scheduling and insertion technique of Nakamura with the system of Oki in view of Bishop, further in view of DeMoney, and further in view of Duso in order to avoid the irritating situation of the different video programs not being reproduced continuously (**see Nakamura, Col. 4, Lines 16-18**).

Referring to claim 2, Oki discloses the dynamic image video information is transmitted via a first transmission line and the processed digital static image video information is transmitted via a second transmission (**see Paragraph 0012**).

Referring to claim 4, Oki in view of Bishop discloses the video information distribution and display system as seen in the rejection of claim 1.

Bishop further comprises first and second storage (buffer) areas, wherein static image data of each image to be displayed is restored and stored in a sequential alternative fashion in one of the first storage area or the second storage area (**see Fig. 1 and Col. 5, Line 6-29 for disclosing the first (A) and second (B) storage areas/display buffers attached to the display system 30 wherein the still images are restored/rendered and stored into the display buffers in a sequential alternative fashion/double buffering technique between each buffer**).



Referring to claim 5, Oki in view of Bishop discloses the video information distribution and display system as seen in the rejection of claim 1.

Bishop further discloses the display device further comprises the sequential alternative fashion that determines an order of storage in one of the first storage area or the second storage area is determined from content designation information contained in the image control signal **(see Col. 5, Lines 22-29 for disclosing the image control signal determines the sequential alternating selection of the display buffers for display, and consequently storage)**.

Referring to claim 6, Oki discloses the video information distribution and display system further comprises the processed digital static image video information includes information for displaying a greater image resolution than the dynamic image video information **(see Paragraphs 0025-0027 for disclosing the still image are capable of displaying at a greater image resolution than the moving/dynamic image video information)**.

Referring to claim 8, Oki in view of Bishop discloses the video information distribution and display system including the video information receiving and display device as seen in the rejection of claim 1.

Bishop further discloses the display device comprises two storage areas for storing the static image to be displayed, and the static image to be displayed the next

time is previously stored to any one of the storage areas (see Fig. 1 and Col. 5, Line 6-29 for disclosing the first (A) and second (B) storage areas/display buffers attached to the display system 30 wherein the still images are restored/rendered and stored into the display buffers in a sequential alternative fashion/double buffering technique between each buffer).

Referring to claim 9, Oki in view of Bishop, and further in view of DeMoney discloses the video information distribution and display system as seen in the rejection of claim 1.

Bishop further discloses wherein a duration of displaying of each segment of the video information is a duration longer than a duration for the segment to be stored to one of the storage areas by returning the segment to a state before the processed digital static image video information is processed in the video information receiving and display device (see Col. 5, Line 61 – Col. 6, Line 3).

Referring to claim 10, Duso discloses output of an interrupt image control signal to the device that is collated with schedule data (see Figs. 34-35 and Col. 45, Line 25 – Col. 48, Line 39 for disclosing when video information not included in the schedule (“one or more clips” not in the original playlist created in step 422) an interrupt image control signal for displaying the clips not included in the playlist/schedule can be generated and sent to the display device (step 423 to 424) to insert the clips not originally included into the schedule).

Referring to claim 12, Duso discloses the interrupt image control signal for inserting the video information not included in the schedule data as seen in the rejection of claim 1. Nakamura discloses the insertion of the video information is immediate when the comparison of the timing information of the fact that the video information to be inserted coincides with the timing of the schedule data at the point where the start time for the next transmission video slot (**see Fig. 10 and Col. 13, Lines 11-38**).

Referring to claim 13, Duso discloses the interrupt image control signal for inserting the video information not included in the schedule data as seen in the rejection of claim 1. Nakamura discloses the comparison of the timing information of the fact that the video information to be inserted will occur with the timing of the schedule data, more specifically at the point where the start time for the next transmission video slot (interpreted as the switching timing), and therefore, when the check to see if the timer has reached said switching timing fails, the video information is not inserted until that switching timing occurs, and is then inserted for display (**see Fig. 10, step s1002 and Col. 13, Lines 11-38**).

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant admitted prior art Oki et al (hereinafter referred to as Oki) JP 2002209193A in view of Bishop et al (hereinafter referred to as Bishop) US 4910683, and further in view of

DeMoney US 6064379, further in view of Duso et al (hereinafter Duso) US 6625750, further in view of Nakamura et al (hereinafter Nakamura) US 5913039, and further in view of Potrebic et al (hereinafter referred to as Potrebic) US 6804824.

Referring to claim 3, Oki in view of Bishop, further in view of DeMoney, further in view of Duso, and further in view of Nakamura discloses the limitations of claim 1 including the video information distribution device, the processed digital static image video information, the dynamic image video information, and the distribution and output of the information, and the video information receiving and display device.

Oki in view of Bishop, further in view of DeMoney, further in view of Duso, and further in view of Nakamura fails to disclose the video information distribution device multiplexes the processed digital static image video information to the dynamic image video information, and the video information receiving and display device demultiplexes the processed digital static image video information from the multiplexed dynamic image video information.

Potrebic et al discloses the video information distribution device multiplexes the processed digital static image video information to the dynamic image video information **(see Col. 1, Lines 29-33 for disclosing all digital programming including both types of video information being multiplexed together by the provider/distribution device)**, and the video information receiving and display device demultiplexes the processed digital static image video information from the multiplexed dynamic image video information **(see Col. 1, Lines 33-36 and Col. 7, Lines 50-63 for disclosing the**

**multiplexed data is identifiably packetized so that when demultiplexed at the client set top box/receiving and display device they are separated from the other data that they were multiplexed with at the provider).**

At the time of the invention, it would have been obvious to use the known technique of multiplexing and demultiplexing before transmission of various types of data over a single transmission line of a network of Potrebic with the known system of Oki in view of Bishop, further in view of DeMoney, further in view of Duso, and further in view of Nakamura in order to take advantage of the well known technique to predictably improve the system by reducing the number of transmission paths needed to deliver the data to each receiver.

***Allowable Subject Matter***

6. Claim 11 is allowed for the same reasons disclosed in the office action dated 01/06/2010.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NICHOLAS CORBO whose telephone number is (571)270-5675. The examiner can normally be reached on Monday through Friday 900am-530pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Beliveau can be reached on (571)272-7343. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/NICHOLAS T CORBO/  
Examiner, Art Unit 2427

12/30/2011